

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 108.00

Revision Date: February 24, 2012

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Benzoyl Chloride

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Benzoyl chloride

Synonym: Benzoic acid chloride

CAS#: 98-88-4

### SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid. Pungent chlorine odor.

Vapor harmful. Lachrymator. Moderately toxic by ingestion, inhalation, and absorption.

Corrosive; causes severe burns.

Combustible liquid. Reacts violently with water.

#### FLINN AT-A-GLANCE

Health-2

Flammability-2

Reactivity-3

Exposure-3

Storage-1

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Do NOT induce vomiting. Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Class IIIA combustible liquid.

Flash point: 72 °C Flammable limits: Lower: 1.2% Upper: 4.9% Autoignition Temperature: 569 °C

When heated to decomposition, emits very acrid fumes of CO and HCl. Reacts violently with water.

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

H-3

F-2

R-1

No Water

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material, neutralize with sodium bicarbonate or calcium hydroxide, and deposit in sealed bag or container. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides, and peracids.

Moisture sensitive material. Store in Flinn Chem-Saf can. Store in a cool, dry place. Use and dispense in a hood.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use exhaust ventilation to keep airborne concentrations low.

Exposure guidelines: PEL 1 ppm (OSHA)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Colorless liquid with a pungent odor.

Solubility: Decomposes in water.

Formula: C<sub>6</sub>H<sub>5</sub>COCl

Formula weight: 140.57

Boiling point: 197 °C

Melting point: -1 °C

Refractive index: 1.5537

Specific gravity: 1.21

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with strong oxidizers, bases, alcohols, and water.

Reacts violently with water.

Shelf life: Poor.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Toxic, corrosive, and lachrymator.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 1900 mg/kg

IHL-RAT LC<sub>50</sub>: 1870 mg/m<sup>3</sup>/2H

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

**SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #1a is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Benzoyl chloride

Hazard class: 8, Corrosive

UN number: UN1736

N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (202-710-8), RCRA code D002.

**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**